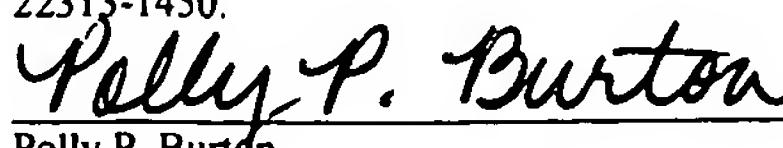


U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE (REV 7-05)		ATTORNEY'S DOCKET NUMBER 045331/314982
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) <b>10/589173</b>
INTERNATIONAL APPLICATION NO. PCT/US2004/013747	INTERNATIONAL FILING DATE 4/4/04	PRIORITY DATE CLAIMED 2/11/04
TITLE OF INVENTION STEM CELL POPULATIONS AND METHODS OF USE		
APPLICANT(S) FOR DO/EO/US Tracy Gentry, Sandra J. Foster, Andrew E. Balber		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). This submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31). (Check box if a Demand was filed in PCT.)</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))           <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ul> </p> <p>6. <input type="checkbox"/> A English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ul> </p> <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ul> </p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
Items 11. To 20. below concern document(s) or information included:		
<p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</p> <p><input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</p> <p>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input type="checkbox"/> Other items or information:</p>		

U.S. APPLICATION NO. (If known) 107589173	INTERNATIONAL APPLICATION NO. PCT/US2004/013747	ATTORNEY'S DOCKET NUMBER 045331/314982		
<input checked="" type="checkbox"/> The following fees have been submitted:		Calculations	PTO USE ONLY	
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))		\$300		
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492 (c)) (If the written opinion prepared by ISA/US or the international preliminary examination report prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1-4))		200		
.....\$ 0				
All other situations.....\$200				
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..\$ 0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....\$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB .....\$400 All other situations .....\$500		400		
<b>TOTAL OF 21, 22 and 23</b>		=		
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)) The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof.				
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	Rate	
- 100 =	/50=		x \$250	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later the date of commencement of the national stage (37 CFR 1.492(h)).		\$		
CLAIMS		NUMBER FILED	NUMBER EXTRA	RATE
Total Claims		96 -20 =	76	X \$ 50.00
Independent Claims		5 - 3 =	2	X \$200.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$
<b>TOTAL OF ABOVE CALCULATIONS</b>		=	<b>\$ 5,100.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.			<b>\$ 2,550.00</b>	
<b>SUBTOTAL</b>		=	<b>\$ 2,550.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$		
<b>TOTAL NATIONAL FEE</b>		=	<b>\$ 2,550.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property		+	\$	
<b>TOTAL FEES ENCLOSED</b>		=	<b>\$ 2,550.00</b>	
		Amount to be Refunded	\$	
		Amount to be Charged	\$	
a. <input type="checkbox"/>	A check in the amount of \$ to cover the above fees is enclosed.			
b. <input checked="" type="checkbox"/>	<b>Please charge my Deposit Account No. 16-0605 in the amount of \$ 2,550.00 to cover the above fees.</b>			
c. <input checked="" type="checkbox"/>	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 16-0605.			
Note: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.				
SEND ALL CORRESPONDENCE TO:   W. Murray Spruill		"Express Mail" Mailing Label Number EV 387076842 US Date of Deposit: August 11, 2006		
REGISTRATION NUMBER 32,943 ALSTON & BIRD LLP Bank of America Plaza 101 South Tryon Street, Suite 4000 Charlotte, NC 28280-4000 Tel Raleigh Office (919) 862-2200 Fax Raleigh Office (919) 862-2260 Customer Number 00826		I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail PostOffice to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Attn: DO/US (PTO) Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.   Polly P. Burton		